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W.J. Liang

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The Complete Stack: e-CNY, mBridge, and the Architecture of Monetary Optionality

Abstract

This paper argues that China's dual circulation strategy constitutes a monetary architecture project rather than the trade rebalancing or industrial policy framework most Western analysts have treated it as. Its two operational legs, the digital renminbi (e-CNY) and the mBridge multi-CBDC cross-border settlement platform, are not independent modernisation initiatives with compatible policy aims. They are the domestic and international components of a single coherent architecture, designed to make China's dependency on dollar-denominated settlement infrastructure optional at a moment of China's choosing rather than at a moment of external imposition. The e-CNY establishes granular visibility into and programmable control over domestic capital flows through a two-tier issuance model that routes all transactions through central bank infrastructure. mBridge establishes a settlement mechanism for cross-border transactions between participating central banks that operates entirely outside the SWIFT correspondent banking network. Read together, these systems constitute the first complete alternative

monetary stack deployed at national scale by any economy operating at significant weight in global trade and finance. This paper maps each leg in sequence, examines the architectural decisions that reveal design intent rather than stated policy purpose, and reads the two legs together as a unified strategic instrument. The analysis is structural. The conclusions are available to any reader who follows the mechanics.

I. Introduction

The standard Western reading of China's dual circulation strategy locates it inside trade economics. Domestic demand replaces export dependency; self-sufficiency reduces vulnerability to supply chain disruption; the internal market absorbs what external demand can no longer be counted on to take. This reading is not wrong. It is incomplete in a way that makes it systematically misleading for capital analysis.

The dual circulation framework, as articulated at the Fifth Plenary Session of the 19th Central Committee of the Chinese Communist Party in October 2020, contains a monetary architecture dimension that most Western analysis has not mapped with precision. The two systems developed in parallel with that strategy, the e-CNY and mBridge, are not payment modernisation projects. They are the operational infrastructure through which the dual circulation's monetary logic is implemented.

The distinction is not semantic. Payment modernisation projects optimise for efficiency, speed, and cost reduction within existing monetary frameworks. The e-CNY and mBridge do not optimise within the existing dollar-centred framework. They construct an alternative to it. The design choices embedded in each system, which this paper examines in detail, are not the choices of an efficiency project. They are the choices of an architecture project with specific control and sovereignty objectives.

International capital positioned in or adjacent to China is reading these systems primarily through the lens of payment rail innovation, digital currency development, and competitive dynamics in cross-border settlement. This paper argues that lens produces the wrong conclusions. The correct lens is monetary architecture: what does this stack do, what does it make possible that was not previously possible, and what does its

construction imply about China's strategic position with respect to the dollar system it has operated within for four decades.

II. What Dual Circulation Actually Describes

The dual circulation strategy describes two circulation loops operating simultaneously within and around the Chinese economy. The domestic circulation loop, referred to in official discourse as the principal circulation, runs from production through distribution to consumption within China's domestic market. The international circulation loop engages with global trade, supply chains, and capital markets. The strategy's stated objective is to make the domestic loop self-sustaining and primary, with the international loop functioning as a complement rather than a dependency.

Most analysis of dual circulation ends there. The trade economics follow straightforwardly: build domestic consumption capacity, reduce reliance on export markets, invest in supply chain self-sufficiency across critical industrial sectors, and the economy is less exposed to external demand shocks or strategic trade pressure from counterparties who understand their leverage.

The monetary dimension of dual circulation is less frequently analysed, and it is operationally prior to the trade dimension. A domestic circulation loop that remains settled in dollar-denominated infrastructure is not, in any meaningful strategic sense, independent. The payments, the credit facilities, the cross-border settlement infrastructure, and the correspondent banking relationships that give China's financial activity its operational architecture all ran, at the moment the dual circulation strategy was announced, substantially through or within the dollar system. A Chinese exporter settling a Belt and Road construction contract, a Chinese institution funding a cross-border acquisition, a Chinese importer paying for energy: all of these, in 2020, touched dollar correspondent banking infrastructure at some point in the transaction chain.

The e-CNY and mBridge are the answer to that dependency. China had already taken a partial step with the launch of the Cross-Border Interbank Payment System (CIPS) in 2015 and its Phase 2 expansion in 2018; CIPS provides renminbi-denominated cross-border

settlement infrastructure that partially reduces reliance on SWIFT messaging for renminbi transactions. At launch, CIPS operated with 19 direct participants and 176 indirect participants. As of March 2026, the system carries 194 direct participants and 1,597 indirect participants across 126 countries and regions, with a broader network footprint covering more than 5,100 banking institutions in 191 countries (CIPS, 2026). CIPS is a renminbi settlement system built to operate alongside the existing dollar-centric infrastructure. The e-CNY and mBridge are built to replace it.

III. The Domestic Leg: e-CNY and the Mechanics of Visibility

The People's Bank of China began structured pilot programmes for the e-CNY in 2020 across four cities: Shenzhen, Suzhou, Chengdu, and the Xiong'an New Area. The PBoC published its first comprehensive white paper on the programme in July 2021, establishing the official architectural description from which this analysis works (People's Bank of China, 2021). As of the current pilot configuration, the programme covers 26 specific demonstration zones across 17 provinces, encompassing every major Chinese economic centre including Beijing, Shanghai, Shenzhen, and Chengdu, the entirety of Hainan province as a whole-province trial, and cross-border retail pilots in Hong Kong, Macau, and merchant corridors across Laos, Thailand, Cambodia, and Singapore (Atlantic Council, 2025; MDPI, 2024).

The architecture has four defining features. Each is described in PBoC documentation. Each, examined structurally, serves a function that payment modernisation alone does not explain.

Two-tier issuance. The PBoC issues e-CNY to a set of authorised Tier 1 institutions. The original six were the foundational state-owned commercial banks: Industrial and Commercial Bank of China, Agricultural Bank of China, Bank of China, China Construction Bank, Bank of Communications, and Postal Savings Bank of China (People's Bank of China, 2021). The operator tier has since expanded substantially. As of the current configuration, 22 authorised Tier 1 institutions distribute the instrument, including two early joint-stock additions (China Merchants Bank and Industrial Bank), seven newly approved national joint-stock lenders, the Bank of Ningbo as the first regional city commercial bank operator,

and four additional city commercial banks completing technical onboarding (BingX, 2025; Hogan Lovells, 2025).

The most structurally significant additions are MYbank, backed by Ant Group, and WeBank, backed by Tencent. These are not peripheral additions to the distribution network. MYbank and WeBank are the institutional backends of Alipay and WeChat Pay respectively; the two private payment platforms that together command over 90 percent of China's non-cash payment market (ResearchGate, 2025). The inclusion of both as Tier 1 operators means the PBoC has not positioned the e-CNY to compete with the dominant private payment infrastructure from outside. It has absorbed that infrastructure as a distribution layer for central bank money. Alipay and WeChat Pay users can now spend e-CNY directly through the existing QR code networks of both platforms without leaving those interfaces. The private duopoly is being converted into state monetary infrastructure.

The two-tier architecture is described in official documentation as preserving the existing role of commercial banks and avoiding disintermediation of the deposit-taking system. This is accurate as far as it goes. It is also an architecture in which every unit of e-CNY in circulation exists within a system where the central bank has issued it, can trace it through the Tier 1 layer, and can in principle modify or recall it. The commercial bank distribution layer does not break the visibility chain. It extends it outward while maintaining the institutional relationships the PBoC manages through the existing reserve system.

Tiered anonymity. The PBoC's framework for e-CNY privacy operates through four wallet tiers. Tier 4, requiring only a mobile phone number, permits single transactions up to RMB 2,000, daily cumulative flows up to RMB 5,000, and a maximum balance of RMB 10,000. Tier 3, adding a national identity card, raises limits to RMB 5,000, RMB 10,000, and RMB 20,000 respectively. Tier 2, adding a linked bank account, raises them to RMB 50,000, RMB 100,000, and RMB 500,000. Tier 1, requiring full in-person identity verification, carries no upper limits on any dimension (Stanford DigiChina, 2025; IMF, 2022; Atlantic Council, 2025).

The system operates under the PBoC's stated principle of "small amounts are anonymous, large amounts are traceable." The anonymity available to Tier 4 wallet holders derives from a specific regulatory technicality: Chinese telecoms law blocks mobile operators

from sharing a user's real-name identity with third parties under normal commercial circumstances. Tier 4 is therefore characterised as anonymous in the sense that commercial counterparties cannot access a user's identity through the mobile number alone. All mainland Chinese mobile numbers are, however, legally bound to a verified real-name national identity card under existing telecoms registration requirements. The PBoC can request identity unmasking at any tier under anti-money laundering or criminal warrant procedures (Stanford DigiChina, 2025). Privacy from commercial counterparties exists at small transaction sizes. Privacy from the state does not exist at any transaction size or under any wallet tier.

Programmability. The baseline e-CNY instrument issued by the PBoC carries no expiry condition. This is a critical technical distinction that most commentary on e-CNY programmability elides. The programmable expiry properties documented in pilot programmes apply to municipal stimulus vouchers distributed through the e-CNY infrastructure, not to the central bank instrument itself (World Bank, 2022; University of Cambridge, 2023). When local governments distribute economic stimulus through the e-CNY app, they embed smart contract conditions forcing those specific funds to expire. The standard window across the major pilot distributions has been 6 to 7 calendar days; in the landmark Shenzhen and Suzhou airdrop programmes, funds were deposited on Monday mornings and programmed to expire at midnight on the following Sunday. Extended windows of up to 30 days have been applied to cross-border tourism distribution campaigns and large-scale industrial trade-in programmes (World Bank, 2022).

The design follows Gesell monetary principles: stimulus capital that cannot be saved but can only be spent within a defined window maximises economic velocity and prevents hoarding of distributed funds (Iowa State University, 2023). Three further mechanisms operate within this framework. A claw-back sequence executes automatically when a user reaches the expiration timestamp with unspent funds; the digital asset loses purchasing value and routes back to the issuing municipal treasury. Stimulus funds are hard-coded for use only at whitelisted merchant category codes, typically local physical retail, catering establishments, and public transit nodes within the issuing pilot city. Where a consumer purchases with stimulus e-CNY within the active window but subsequently requests a merchant refund after expiry, the smart contract intercepts the refunded amount and returns it directly to the government issuer rather than converting it to standard non-expiring e-CNY (University of Cambridge, 2023; World Bank, 2022).

The infrastructure supports conditional monetary instruments without the base instrument itself being conditional. This is the operationally significant design choice: the programmability layer is available to any authorised issuer within the e-CNY system, applicable to any distribution of funds through that system, without requiring modification of the underlying central bank instrument.

The M1/M2 reclassification. The e-CNY was designed and launched as an M0 instrument: classified as a cash equivalent, non-interest bearing, functioning as digital physical currency. That classification is no longer current. On January 1, 2026, the PBoC formally reclassified the e-CNY as deposit liabilities within the M1 and M2 monetary aggregates, removing it from the M0 cash-equivalent category and authorising it to bear interest on verified wallet balances (State Council of the People's Republic of China, 2025; China Daily, 2026).

The M0 classification served a specific architectural purpose. A non-interest-bearing central bank digital currency does not directly compete with commercial bank deposits, preserving the Tier 1 intermediation layer the PBoC relies on for monetary transmission. The reclassification dissolves that protection. An interest-bearing e-CNY competes directly with commercial bank deposits for household and corporate savings, issued through central bank infrastructure with full PBoC ledger visibility at every tier. The disintermediation risk the two-tier architecture was explicitly designed to contain is now structurally present. Simultaneously, the PBoC has acquired a direct monetary policy instrument in the e-CNY deposit rate that operates on the liability side of the commercial banking system in a way no prior central bank instrument could reach.

The adoption figures as of December 2025 reflect a system that has scaled substantially from its 2021 origins while remaining modest relative to China's total payment infrastructure. The programme carries 230 million personal wallets and 19.08 million corporate wallets, with cumulative transaction value reaching 19.5 trillion yuan ($2.8 trillion) across 3.57 billion total transactions (China Daily, 2026; PBoC, 2025). The contrast with the private payment duopoly is the analytically significant comparison. Alipay processes approximately 145 trillion yuan ($20.1 trillion) in transactions annually, representing 53 to 54 percent of the domestic mobile wallet market, with 1.4 billion global monthly active users (Asian Banking and Finance, 2025). WeChat Pay processes an

estimated 15 to 20 trillion yuan annually with 935 million active payment users in mainland China, representing 39 to 42 percent of the domestic mobile wallet market, and processes over one billion commercial transactions per day (BusinessOfApps, 2025). WeChat Pay processes more commercial transactions in four days than the e-CNY network has processed in its entire pilot lifespan. In a single year during 2024 to 2025, the e-CNY processed approximately 4.2 trillion yuan against the 1.3 quadrillion yuan processed by commercial bank cards and private apps in the same period (Peterson Institute for International Economics, 2026). The e-CNY's cumulative value represents 0.16 percent of China's baseline currency supply and approximately 0.2 percent of total retail payment flow (Peterson Institute for International Economics, 2026; China Daily, 2026).

The retail adoption ceiling is not a failure of the e-CNY programme. The PBoC's response to it, the January 2026 M1/M2 reclassification and the simultaneous focus on wholesale cross-border deployment through mBridge, confirms that the architecture has adapted to where adoption is actually occurring. The domestic consumer market is not where the complete stack's strategic weight rests.

IV. The International Leg: mBridge and the Architecture of Settlement Optionality

Project mBridge originated as a collaborative research and development initiative between the BIS Innovation Hub's Hong Kong Centre, the Hong Kong Monetary Authority, the Bank of Thailand, the Central Bank of the United Arab Emirates, and the Digital Currency Institute of the People's Bank of China. Its stated purpose was to develop a multi-CBDC platform for real-time cross-border payments and foreign exchange settlement that could reduce the cost, time, and correspondent banking dependency of existing international payment infrastructure (Bank for International Settlements, 2022).

On June 5, 2024, the platform reached minimum viable product stage, announced simultaneously by the BIS Innovation Hub, the HKMA, the PBoC, the Bank of Thailand, and the Central Bank of the UAE (Hong Kong Monetary Authority, 2024; Central Bank of the United Arab Emirates, 2024). On the same date, the Saudi Central Bank (SAMA) formally joined mBridge as the fifth founding participant, upgrading from its prior status as an

observing member to full operational participation, including deployment of a functional validator node on the mBridge blockchain network authorised to settle real-value wholesale cross-border transactions (Saudi Central Bank, 2024).

Five months later, on October 31, 2024, BIS General Manager Agustín Carstens announced the BIS's formal withdrawal from the project at the Santander International Banking Conference in Madrid. Carstens characterised the departure as graduation, stating that "the project has been so successful that we can declare that we have graduated out," and explicitly denied that the withdrawal reflected either failure or political considerations, framing the BIS Innovation Hub as an early-stage incubation vehicle designed to achieve technical maturity and transfer operational control to the founding central banks (Finadium, 2024; The Banker, 2024).

The geopolitical context renders that characterisation incomplete as a causal account. The BIS withdrawal occurred one week after the BRICS summit in Kazan, Russia, at which President Vladimir Putin publicly cited the mBridge multi-CBDC ledger architecture as a template for a "BRICS Bridge" payment network designed to bypass US dollar dominance and circumvent G7 financial sanctions. Carstens addressed the association directly in Madrid: "mBridge is not the BRICS bridge... the BIS does not operate with any countries subject to sanctions" (Forbes, 2024; The Economist, 2024). The BIS simultaneously advanced Project Agorá, a tokenised deposit settlement initiative structured around G7 central banks and SWIFT-compatible infrastructure, as the multilateral institutional alternative to the mBridge architecture (Bank for International Settlements, 2024). Two competing settlement architectures, one operating outside dollar correspondent banking and one built to remain within it, now represent the institutional fork in cross-border payment infrastructure.

The sequencing matters for the analytical record. Saudi Arabia did not join mBridge to replace the BIS's institutional cover. SAMA's accession was a founding commitment made at the moment of operational launch, while the BIS was still formally a project partner. The BIS then withdrew from a platform whose strategic character, including the participation of the world's largest crude oil exporter in a settlement system co-led by the PBoC, had been established before its departure rather than because of it.

The mBridge Ledger achieves atomic settlement for wholesale cross-border transactions in approximately 7 seconds. This is not a messaging acknowledgement; it represents simultaneous finality and settlement, with foreign exchange ledger entries updating concurrently across both central bank nodes, eliminating settlement risk and counterparty credit risk at the point of transaction (Bank for International Settlements, 2022; Central Bank of the UAE, 2024). Where a transaction subsequently interacts with a recipient institution's domestic real-time gross settlement network, the full end-to-end cycle extends beyond that window; the 7-second figure describes interbank wholesale settlement finality on the mBridge ledger itself. The contrast with the traditional correspondent banking timeline of 3 to 5 business days remains structurally decisive.

SWIFT's own ISO 20022 modernisation programme has materially improved delivery times within its existing architecture: approximately 75 percent of SWIFT payments now reach destination banks within 10 minutes (SWIFT, 2025). This reflects operational improvement, not architectural change. SWIFT processes an average of 53.3 million FIN messages per day across more than 11,500 connected entities in over 220 countries and territories, spanning more than 40,000 distinct payment pathways, with a peak single-day record of 68 million messages (SWIFT, 2025). The US dollar accounts for 51.14 percent of total SWIFT payment value, a figure that reached a historic high within the current reporting period, reflecting in part a 2023 SWIFT methodology revision that captured previously underrepresented dollar-denominated financial messaging; the euro accounts for 21.30 percent; the Chinese renminbi accounts for 3.10 percent, placing fifth globally (SWIFT Global Currency Tracker, 2026). The BIS confirms that the dollar appears on at least one side of 89 percent of all global foreign exchange transactions (Bank for International Settlements, 2024). SWIFT's dependency on dollar correspondent banking relationships for non-trivial cross-border transactions is architectural. The network's operational modernisation cannot alter that structural fact. mBridge does not require dollar correspondent banking relationships at all.

The scale of mBridge has grown at a rate that changes the analytical framing for the platform's strategic significance. The 2022 pilot, running from August 15 to September 23, processed 164 cross-border payment and foreign exchange transactions with a combined settled value exceeding $22 million equivalent across 20 commercial banks in four jurisdictions (Bank for International Settlements, 2022; Hong Kong Monetary Authority, 2022). By late 2025 to early 2026, the platform had processed $55.49 billion in total

cross-border settlement value across 4,047 transactions (Reuters, 2026; PYMNTS, 2026). The growth multiple from proof-of-concept to current operational scale is approximately 2,500 times by transaction value. mBridge is no longer early-stage infrastructure. It is an operational wholesale settlement system at meaningful scale, processing volumes that, while a fraction of SWIFT's daily throughput, represent real capital moving through a settlement architecture that requires no dollar intermediation.

The distribution of settlement volume within mBridge clarifies the relationship between the platform and the domestic instrument. The e-CNY accounts for 95.3 percent of total settlement volume processed on the mBridge network (Atlantic Council, 2025; Peterson Institute for International Economics, 2025). The platform's formal description as a multi-CBDC settlement system is technically accurate; central bank digital currencies from multiple participating monetary authorities are issued and settled across the shared ledger. In operational terms, mBridge functions as an e-CNY settlement network with multi-central-bank participation. The international leg of the complete stack is not independent of the domestic leg. It is an extension of it.

V. The Stack Read Together: Architectural Intent and Strategic Logic

The e-CNY and mBridge are treated in most Western analysis as separate initiatives: domestic digital currency development on one hand, experimental cross-border settlement infrastructure on the other. The analytical error is in the separation.

The domestic leg establishes complete visibility and programmable control over capital flows within China's monetary system. The January 2026 M1/M2 reclassification extends that control to the liability side of the commercial banking system, creating direct competition with bank deposits through an instrument that carries full PBoC ledger visibility at every tier. The international leg establishes a settlement mechanism for cross-border transactions that does not require dollar intermediation; and the 95.3 percent e-CNY share of mBridge settlement volume confirms that the international leg functions operationally as a projection of the domestic instrument rather than a parallel

system built on different foundations. Together they produce a monetary stack with a specific set of capabilities that neither system possesses independently.

The combined capability is domestic monetary visibility plus international settlement independence. A monetary authority with both capabilities is not operationally dependent on the dollar system for its core monetary functions. It can observe and manage what moves domestically with central bank ledger precision, and it can settle what crosses borders in central bank money without requiring the dollar as vehicle currency for either leg.

The staging logic as architectural signal. The sequencing of the build is analytically legible. Domestic control infrastructure through the e-CNY is established first and at population scale. International renminbi settlement through CIPS is expanded, growing from 19 direct participants at launch to 194 direct participants and 1,597 indirect participants across 126 countries by March 2026, to create a renminbi-compatible layer within the existing dollar-centred system (CIPS, 2026). International multi-currency settlement through mBridge is developed under multilateral cover and operationalised at minimum viable product stage on June 5, 2024, with the primary hydrocarbon supplier to China joining as the fifth founding participant on the same date. The multilateral cover is released five months later, once the platform's operational character and participant set are established, and the institution exiting simultaneously advances a competing architecture aligned with G7 and SWIFT-compatible infrastructure.

Each stage creates the conditions for the next. CIPS demonstrated that Chinese institutions could manage cross-border renminbi settlement at scale within an existing messaging framework. mBridge demonstrated that multi-currency cross-border settlement could operate without SWIFT at wholesale speeds, and at a volume that has grown 2,500 times from its initial pilot. The e-CNY is demonstrating, at a pace that remains below the ceiling of the system's capacity, that domestic monetary flows can be observed and programmed at the instrument level. No single stage is the architecture. The three stages together are.

What the architecture does not claim. The complete stack thesis carries its own analytical limits, which should be stated.

The e-CNY has not achieved meaningful retail adoption relative to China's existing payment infrastructure. At 0.2 percent of total retail payment flow and 0.16 percent of the currency supply base, the instrument remains operationally marginal in the domestic consumer economy (Peterson Institute for International Economics, 2026; China Daily, 2026). The PBoC's pivot toward wholesale and cross-border deployment, marked by the January 2026 M1/M2 reclassification and the mBridge concentration, reflects recognition of this ceiling rather than a pre-designed endpoint. The architecture has adapted. The retail layer remains underdeveloped relative to the instrument's technical capacity.

mBridge at $55.49 billion in processed settlement value is an operational system that is not yet a systemic alternative to SWIFT. Its participant set covers specific trade corridors of strategic importance to China, not the breadth of global trading relationships that would constitute systemic substitution.

Neither observation weakens the architectural thesis. The question for analysis is whether the architecture being assembled is capable of scaling to systemic relevance. The growth trajectory, the participant accession pattern, the 95.3 percent e-CNY concentration in international settlement volume, and the BIS's departure at the moment of operational maturity followed immediately by advancement of a competing G7-aligned architecture all indicate that the question of scalability has been answered in the affirmative by the parties with the most direct information about the platform's capabilities.

VI. Implications for International Capital

International capital positioned in or adjacent to China faces a specific analytical requirement that the standard dual circulation framework does not provide. The question is not whether China achieves full dollar independence; that question is not answerable on any near-term horizon. The question is what the existence of the complete stack changes for capital positioned in or transacting with China now.

Three implications are direct and do not require projection.

Settlement pathway exposure. Entities conducting significant business with Chinese counterparties need to model scenarios in which mBridge is the settlement infrastructure

for those transactions. mBridge is operational, having processed $55.49 billion in cross-border settlement value across its participant jurisdictions. The conditions under which a Chinese counterparty or a Gulf energy exporter might prefer mBridge settlement over dollar correspondent banking already exist and are likely to expand as the participant set grows and as US sanctions policy creates additional incentives for non-dollar settlement infrastructure. Saudi Arabia's participation provides the hydrocarbon corridor that constitutes the single largest category of China's import payments; the SAMA transition from observer to full participant with an active validator node represents a deliberate operational commitment, not an experimental posture.

Domestic capital flow visibility. Capital operating within China's domestic economy operates in a system where the PBoC is building granular ledger-level visibility into capital flows at the individual transaction scale. The January 2026 M1/M2 reclassification extends this visibility into the deposit liability space. The Tier 4 anonymity paradox is the precise statement of what this means for capital that assumed transactional privacy at small scales: the anonymity is conditional, technically mediated by telecoms law, and reversible under administrative procedures that carry no commercial constraint on their exercise.

The participant set as strategic signal. The mBridge participant roster of China, Hong Kong, Thailand, the UAE, and Saudi Arabia covers China's primary energy supply corridor, two of the three largest sovereign wealth fund ecosystems by assets under management, and the regional financial hub through which Chinese cross-border capital flows are structured. The accession of SAMA as a full participant on the day of the platform's operational launch, after a sustained engagement as an observing member throughout the development phase, represents a calculated commitment to the platform's architecture. Capital that reads the participant composition as incidental to the platform's strategic design has not followed the staging logic.

Conclusion

The dual circulation strategy is a monetary architecture project. Its domestic leg, the e-CNY, establishes the control and visibility infrastructure that makes a sovereign monetary authority operationally legible to itself at the level of individual transactions, without relying solely on aggregated commercial bank reporting. Its January 2026

reclassification as M1/M2 deposit liabilities extends that infrastructure into direct competition with commercial bank deposits, creating a monetary policy instrument that operates on the liability side of the commercial banking system with a precision no prior central bank tool could reach. Its international leg, mBridge, establishes the settlement infrastructure that makes cross-border transactions independent of dollar correspondent banking for participating jurisdictions; a platform that has grown from a $22 million pilot to $55.49 billion in processed settlement value, with the e-CNY accounting for 95.3 percent of that volume.

China has not exited the dollar system. The US dollar accounts for 51.14 percent of total SWIFT payment value, a historic high, and appears on at least one side of 89 percent of all global foreign exchange transactions. China holds $3.4105 trillion in foreign exchange reserves, the world's largest national stockpile (State Administration of Foreign Exchange, 2026). Dollar system participation remains substantial.

The complete stack does not require China to exit the dollar system to have strategic value. Its value lies precisely in making exit optional: available when rational, unnecessary when it is not. A monetary authority that can observe every domestic transaction at ledger level, programme the conditions under which distributed money may be spent, settle cross-border trade in central bank money entirely outside SWIFT, and do so through a system in which its own digital currency accounts for 95.3 percent of international settlement volume, occupies a structurally different strategic position than one that has not built any of those capabilities, regardless of whether it exercises the exit option in any given period.

What the architecture makes possible in the decade ahead, across the specific mechanisms of the M1/M2 deposit rate as a direct monetary policy instrument, the gradual expansion of the mBridge participant set beyond the current five central banks, the absorption of Alipay and WeChat Pay as distribution infrastructure for state monetary instruments, and the programmable conditions available to any authorised issuer within the e-CNY system, is the subject of the papers that follow in this series.

References

Asian Banking and Finance. (2025). *Alipay transaction volume and user metrics*. https://asianbankingandfinance.net

Atlantic Council. (2025). *Central bank digital currency tracker: China*. GeoEconomics Center. https://www.atlanticcouncil.org

Auer, R., Cornelli, G., & Frost, J. (2020). *Rise of the central bank digital currencies: Drivers, approaches and technologies* (BIS Working Papers No. 880). Bank for International Settlements.

Bank for International Settlements. (2022). *Project mBridge: Connecting economies through CBDC*. BIS Innovation Hub. https://www.bis.org

Bank for International Settlements. (2024). *Project mBridge reaches minimum viable product stage*. BIS Innovation Hub. https://www.bis.org

Bank for International Settlements. (2024). *Triennial central bank survey: OTC foreign exchange turnover*. https://www.bis.org

BingX. (2025). *e-CNY tier-1 operator roster and expansion*. https://bingx.com

BusinessOfApps. (2025). *WeChat statistics: Revenue, users and engagement*. https://www.businessofapps.com

Carstens, A. (2021). *Digital currencies and the future of the monetary system*. Hoover Institution Policy Seminar. Bank for International Settlements.

Carstens, A. (2024, October 31). *Remarks at the Santander International Banking Conference, Madrid*. [As reported in Finadium, The Banker, Forbes, and The Economist.]

Central Bank of the United Arab Emirates. (2024). *Project mBridge minimum viable product announcement* [Press release]. https://www.centralbank.ae

China Daily. (2026). *e-CNY programme data: December 2025 figures*. https://www.chinadaily.com.cn

Chorzempa, M. (2021). *China's evolving digital payments landscape and implications*. Peterson Institute for International Economics.

CIPS. (2026, April 9). *CIPS worldwide participants*. Cross-Border Interbank Payment System. https://www.cips.com.cn

The Economist. (2024). *The BIS steps back from mBridge*. https://www.economist.com

Fanusie, Y. J., & Jin, E. (2021). *China's digital currency: Adding financial data to digital authoritarianism*. Center for a New American Security.

Finadium. (2024). *BIS General Manager Carstens on mBridge graduation*. https://finadium.com

Forbes. (2024). *mBridge, BRICS, and the BIS withdrawal*. https://www.forbes.com

Hogan Lovells. (2025). *e-CNY operator framework and wallet architecture*. https://www.hoganlovells.com

Hong Kong Monetary Authority. (2022, October 26). *Project mBridge 2022 pilot results* [Press release]. https://www.hkma.gov.hk

Hong Kong Monetary Authority. (2024, June 5). *Project mBridge reaches minimum viable product stage* [Press release]. https://www.hkma.gov.hk

International Monetary Fund. (2022). *Digital money and central bank digital currencies: An executive summary*. IMF Finance & Development, 59(1). https://www.elibrary.imf.org

Iowa State University. (2023). *Gesell monetary theory and currency expiry mechanisms*. Department of Economics. https://www.econ.iastate.edu

MDPI. (2024). *e-CNY pilot coverage and adoption analysis*. https://www.mdpi.com

People's Bank of China. (2021). *Progress of research & development of e-CNY in China*. Working Group on E-CNY Research and Development of the People's Bank of China.

People's Bank of China. (2025). *e-CNY programme data and wallet statistics*. https://www.pbc.gov.cn

Peterson Institute for International Economics. (2025). *mBridge settlement architecture and volume distribution*. https://www.piie.com

Peterson Institute for International Economics. (2026). *China gives state-backed digital cash: US and Europe should take note*. https://www.piie.com

PYMNTS. (2026, January). *Cross-border payments platform Project mBridge processed $55.49B in transaction volume*. https://www.pymnts.com

ResearchGate. (2025). *Alipay and WeChat Pay market dynamics in Chinese digital payments*. https://www.researchgate.net

Reuters. (2026, January 16). *China-led cross-border digital currency platform sees surge*. https://www.reuters.com

Saudi Central Bank. (2024, June 5). *SAMA joins Project mBridge as full participant* [Press release]. Saudi Press Agency. https://spa.gov.sa

Stanford DigiChina. (2025). *Lexicon: Controllable anonymity/managed anonymity and China's digital yuan*. https://digichina.stanford.edu

State Administration of Foreign Exchange. (2026, April 7). *China foreign exchange reserves data*. https://www.safe.gov.cn

State Council of the People's Republic of China. (2025). *e-CNY interest-bearing deposit framework and M1/M2 reclassification*. https://english.www.gov.cn

SWIFT. (2025). *Year of shared progress: 5 highlights of 2025*. https://www.swift.com

SWIFT Global Currency Tracker. (2026). *Global payment currency market share*. https://www.swift.com/products/global-currency-tracker

The Banker. (2024). *BIS exits mBridge at minimum viable product stage*. https://www.thebanker.com

University of Cambridge. (2023). *Programmable money and e-CNY stimulus voucher mechanics*. Department of Computer Science and Technology. https://www.cl.cam.ac.uk

World Bank. (2022). *Central bank digital currencies and programmable money*. https://blogs.worldbank.org